# Diet and Memory: The Best Diet to Boost Your Brainpower

TOTAL MEMORY WORKOUT

Source: TOTAL MEMORY WORKOUT: 8 Easy Steps to Maximum Memory Fitness, by Cynthia R. Green, Ph.D., Founding Director of the Memory Enhancement Program at Mount Sinai School of Medicine

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Are you familiar with the expression "you are what you eat"? Have you ever really thought about what it means? Most of us know that nutrition influences our overall health. Yet we still seem to have difficulty making the connection between what we eat and how well our bodies function day to day. Diet plays an important role in our overall well-being and it influences memory. How does what we eat help us maximize our memory fitness?

# **How Diet Is Related to Memory**

Diet is an important factor in our overall health. It is a widely accepted fact that what we eat affects our well-being. Through our diet our bodies get the nutrients they need to function. Science has demonstrated again and again how important healthy eating is to living well. Memory is part of our overall health picture. Therefore, anything that affects our total fitness will impact our memory health. Nutrition is an important concern for memory because it affects our overall well-being.

Diet plays an important role specifically in memory health. A healthy memory requires fit brain function. The energy that the brain needs to work comes, of course, from the nutrition provided by diet. In this way nutrition directly influences memory fitness. Our diet gives us the energy we need to remember.

## The Best Diet to Boost Your Brainpower

A sound diet for memory doesn't have to be complicated. Here are some simple tips on how you can help yourself get the best food for thoughts.

# Eat a Healthy, Well-Balanced Diet

One of the most important things you can do for your memory is simply to eat well. Brain cells—indeed, all body cells—need adequate nutrition for normal activity. Current dietary guidelines suggest that a varied diet that is low in fat and high in fruits, whole grains, vegetables, and protein is best. Fruits and vegetables can also be important food sources of antioxidants, food components that may provide protection from disease and aging. The U.S. Department of Agriculture's recommended dietary guidelines are a great resource for figuring out exactly what a well-balanced diet should include.





#### Eat Often

You can benefit more fully from your diet if you spread your nutritional intake evenly over the course of the day. Rather than eating three large meals, try planning six smaller meals during your day. If that's too cumbersome, aim for three medium-sized meals with three snacks in between. Your body will absorb nutrients more efficiently, allowing you to get the most from your food.

#### **Drink Often**

We frequently forget the importance of liquids in our diet. Yet adequate hydration is important to all our body tissues, including our brains. Drinking approximately thirty-six to sixty-four ounces of water daily will help keep those thoughts flowing.

#### Take a Good Multivitamin

In general, your daily food intake should meet your major nutritional needs. However, there may be times when you don't eat as well as you should, or your diet may not routinely include resources for certain essential vitamins or minerals. Add a good multivitamin to your daily routine to ensure that your brain is getting all it needs to remember better. A multivitamin is a terrific nutritional insurance policy. Getting into the habit of taking one can guarantee you get adequate amounts of important substances you might otherwise miss. Look for a multivitamin that contains a wide range of essential vitamins and minerals. The best multivitamin for memory should include 100 percent of the recommended daily allowance (RDA) of vitamins B6, B12, and folic acid (folate) in addition to the minerals zinc and boron. The good news is that most multivitamins from reputable sources already contain adequate levels of these substances.

## Add Some Antioxidants

One of the most prevalent theories of aging is the free-radical theory. "Free radicals" are byproducts of normal oxygen metabolism in the body. According to this theory, free radicals wreak havoc in other cells, causing damage that result in disease and aging. Antioxidants are substances that absorb free radicals, thereby protecting us from the harm they do. While much antioxidant research has taken place in other areas of aging and disease, experts are beginning to find that antioxidants are important in protecting memory function as well. Researcher W.J. Perrig and colleagues looked at the relationship between antioxidants and memory performance in a group of 442 healthy older adults. The analyses they performed focuses on this relationship both immediately and over an eighteenyear period. The researchers found that higher levels of antioxidants in the blood were associated with better memory performance. Other researchers found that vitamin E, considered by many to be one of the most powerful antioxidants, slowed the progression of Alzheimer's disease.

Given this evidence, it's a good idea to add an antioxidant to your diet. While your multivitamin probably includes several antioxidants, you can supplement your diet further by adding an additional dose of vitamin C, vitamin E, or beta-carotene to your vitamin intake. You can also increase your antioxidant dose through your diet. Again, add only moderate amounts of these antioxidants to your diet. While the risks from taking too much of any of these supplements are relatively minimal, overdosing on them is not a good idea.

#### Take Care with Caffeine

Have you had some caffeine today? If so, you are not alone. Caffeine is ever present in the modern diet. While many of us associate caffeine with coffee, it is also found in black and green teas and caffeinated soft drinks, as well as chocolate.

As you may know, caffeine is a drug, a stimulant that heightens our awareness and ability to respond. In fact, at low doses, caffeine can be helpful to memory. By aiding attention, caffeine can improve our focus and make it easier for us to learn and remember. It is for this reason that I often joke to my students that caffeine is our drug of choice for dealing with fatigue. At higher doses, however, caffeine can be overstimulating and interfere with attention and concentration, making it harder to remember.

When does caffeine go from being just enough to becoming a problem? That depends on the individual. Many factors, such as weight, gender, and age influence how you tolerate caffeine. When it comes to how caffeine affects your memory, you are your own best judge. Drinking some caffeine may be helpful. However, you are more likely to have difficulty remembering when you use caffeine to the point of feeling jittery or distracted. The best way to use caffeine is to strike a balance for yourself. Just keep in mind that when it comes to caffeine and memory, less is more.

## Be Wary of the Sugar Bowl

Sugar is another substance common in our diet that can affect our memory performance. Our brains use energy in the form of glucose, or simple sugar. Could a little sweetness therefore help move our memory along? The evidence is mixed. Some scientists have found that small amounts of sugar intake can temporarily enhance learning. This is particularly true for older adults, who may experience some minor alterations in glucose regulation. Yet other researchers have found that a diet high in sugar interferes with memory functioning in the long run.

What strategy should you use to handle sugar in your diet? Again, your best bet is to be aware of your sugar intake. If you want to experiment with the impact sugar has on your memory, try having a high-sugar snack, such as jelly beans or a sugared soft drink, and notice for yourself its effect on your thinking. Are you stimulated or jittery? Are you focused or flighty? Also, if you tend to "crash" after a high sugar snack, make sure to avoid such foods prior to an event where you need memory to be at its best.

### Be Alert to Alcohol

Another common substance in our diet is alcohol. Like caffeine, alcohol is a drug. As a depressant, alcohol inhibits normal neuronal activity. The result? Alcohol may help you feel more relaxed and calm. However, it won't help you remember any better. In fact

there is ample scientific evidence showing that alcohol, even in small amounts interferes with new learning. Heavy use of alcohol within a short span of time can result in memory loss for the period of intoxication, sometimes referred to as an alcoholic blackout. Significant long-term use of alcohol, such as that seen in alcohol dependence, has been associated with a form of memory disorder known as alcohol-related dementia.

Does all this mean you shouldn't drink any alcohol? Of course not. Moderate use of alcohol, such as a glass of wine with dinner, can be enjoyable and may have other beneficial health effects. Bear in mind, however, that alcohol can interfere with your memory ability for the time you are drinking. Balancing your alcohol intake accordingly will allow you to manage its impact on your memory. Only you know how much alcohol is enough. Finally, if you drink heavily, be aware that you may be placing yourself at risk for memory problems (in addition to other serious illnesses). There are many good reasons to take control of your drinking, and ample resources to help you do it.

## **Be Skeptical About Supplements**

It seems like everyone has a special tonic for memory lapses. Ginkgo, biloba, choline, DHEA, phosphatidylserine, L-carnitine, vinpocetine—these are just a few of the "memory cures." Herbal and other natural remedies have become so popular that the nutritional supplement business has become a multibillion-dollar industry. Unfortunately, it is an unregulated industry that does not need to meet Food and Drug Administration standards and is not overseen by any government agency. Nutritional supplement companies therefore have wide discretion in the claims they make about their products. In other words, you have no way of knowing whether such claims are backed by scientific evidence. You don't even have a guarantee that what they claim is in their product is actually there.

Be savvy about supplements. It may be tempting to think that a pill from all-natural sources can magically improve your memory. However, there are several reasons to be a cynic when it comes to supplements:

- You don't need a "memory cure."

  Why would you need a cure for something that isn't broken? For most adults, remembering better is simply a matter of better memory fitness. The best cure for your memory is already within your control. Gallons of "memory tonic" won't help you if you aren't making good memory habits part of your life.
- The proof that supplements really work is mixed. While it is possible that some supplements may help, claims of their effectiveness simply aren't proven. Until there is better oversight of the supplements industry, be wary of the benefits advertised by the companies selling them. Often the scientific evidence is more mixed than they would lead you to believe.
- Natural isn't necessarily better. Don't be misled into thinking that because something is natural or from a different healing tradition it is safe and better than what modern medicine has to offer. Make no mistake: Supplementsherbal, natural, alternative-are drugs. In fact, many of the substances we consider traditional drugs, such as aspirin and penicillin, are natural. Just because a drug is herbal doesn't mean it's safe to take. People have experienced side effects, some quite serious, from taking herbal supplements. There have been

reports of individuals having dangerous reactions to certain supplements, often when the supplement was inadvertently contaminated during processing. Hopefully, future regulation of the supplements industry, either voluntary or imposed, will minimize the risk of such events.

Does this mean you shouldn't try any supplement for your memory? Not necessarily. You may want to experiment with these substances to see if you find them helpful. If you want to try a supplement, make sure you get it from a reputable company. You should discuss using a supplement with your doctor first, especially if you have a chronic medical condition or are on any medications. (There could be potentially dangerous drug/ supplement interactions.) While your doctor may not know much about a particular supplement, try to provide him or her with as much material as you can about it so that he or she can help you make an informed decision. Look for information about different supplements at the library or in objective sources, such as university health newsletters.

Following these nine simple suggestions will give your memory the nutritional advantage it needs to be at its best. Eating better for brainpower doesn't need to be complicated. In many ways, these guidelines are similar to any geared to improving overall health. By incorporating them into your lifestyle you'll give yourself the most food for thoughts.

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